

CLAIMS (29771)

What is claimed is:

1. A method of layered encoding, comprising:
 - (a) applying a base layer perceptual filter to a signal to yield a base layer filtered signal;
 - (b) finding a base layer estimate for said signal by base layer error minimization with said base layer filtered signal; and
 - (c) finding a first enhancement layer estimate for said signal by error minimization with a first enhancement layer perceptual filter applied to an error in said base layer after inverse filtering with said base layer perceptual filter,
 - (d) for $j = 2, \dots, N$, finding a j th enhancement layer estimate for said signal by error minimization with a j th enhancement layer perceptual filter applied to an error in said $(j-1)$ st enhancement layer after inverse filtering with said $(j-1)$ st enhancement layer perceptual filter, wherein at least one of said j th enhancement layer perceptual filters is weaker than said base layer perceptual filter.
2. The method of claim 1, wherein:
 - (a) said estimates are synthesis filtered CELP excitations.
3. A layered encoder, comprising:
 - (a) an estimator for each layer of a layered encoder; and
 - (b) perceptual filters including inverse filters for each layer, wherein at least one of said layer perceptual filters is weaker than another of said layer perceptual filters.

4. A method of decoding a layered encoded signal, comprising:
 - (a) applying a short-term postfiltering to a synthesized layered encoded signal wherein the short-term postfiltering differs for at least two of the number of layers decoded to form said synthesized layered encoded signal.

5. A method of decoding a layered encoded signal, comprising:
 - (a) applying a long-term postfiltering to a synthesized layered encoded signal wherein the long-term postfiltering is independent of the number of layers decoded to form said synthesized layered encoded signal.

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